

ABSTRACT

In order to provide excellent device characteristics and enhance fabrication yield and run-
to-run reproducibility in a buried device structure
5 using a low mesa on a p-type substrate, a cross
sectional configuration before growth of a contact
layer of a device, i.e., after growth of an over-
cladding layer is flattened so as not to cause a
10 problem in crystal quality of the contact layer. A
mesa-stripe stacked body including at least a p-type
cladding layer (2), an active layer (4) and an n-type
cladding layer (6) is formed on a p-type semiconductor
substrate (1), a current-blocking layer (8) is buried
15 in both sides of the stacked body, and an n-type over-
cladding layer (9) and an n-type contact layer (10)
are disposed on the current-blocking layer (8) and the
stacked body. The n-type over-cladding layer (9) is
made of a semiconductor crystal having a property for
20 flattening a concavo-convex shape of upper surfaces of
the current-blocking layer (8) and the stacked body.